June 18, 2007

National Rural Electric Cooperative Association

Comments On

Renewable Portfolio Standards

To

The Energy and Commerce Committee United States House of Representatives

I. Purpose of Portfolio Standards Proposals

a. Do you believe that adopting one or more Federal "portfolio-standard" requirements applied to sources of retail electricity, mandating that a given percentage of the power sold at retail come from particular sources, is an advisable Federal policy? Why or why not?

Electric cooperatives encourage the responsible development of renewable generation that is reliable and cost-effective for all member-owners. Renewable generation can benefit national security, rural communities and the environment. The surest path to developing renewable generation is through a national policy driven by incentives rather than mandates.

The Energy Policy Act of 2005 included an extension of the Production Tax Credit (PTC) that provides an incentive of up to 1.9 cents per kWh for renewable generation. According to the Renewable Energy Business Alliance, this extension alone spurred nearly 15,000 MW of new renewable capacity and 68,212 jobs. EPACT also established the Clean Renewable Energy Bond (CREB) program that delivers an incentive for not-for-profit electric cooperatives and public power systems. \$1.2 billion has been authorized for the CREB program to date – but the program has inspired a flood of 786 project applications totaling \$2.63 billion. EPACT also authorized the Renewable Energy Production Incentive (REPI) program. NRECA supports the extension and expansion of these proven ways to enable all utilities to make use of local renewable resources.

Beyond incentives, electric cooperatives support voluntary goals that fully utilize the potential of the agricultural sector. NRECA serves on the steering committee of 25x'25, an agriculture group with a goal that by year 2025 America's farms, ranches and forests will provide 25% of the total energy consumed in the United States, while continuing to produce safe, abundant and affordable food, feed and fiber. NRECA has worked closely with representatives of the farm, ranch and forestry communities to develop a roadmap to achieving this goal - "The 25x'25 Action Plan: Charting America's Energy Future." The plan provides a strong policy framework to increase national energy security, foster rural economic opportunity, and benefit the environment - without additional federal mandates.

Some groups advocate the establishment of a federal renewable portfolio standard (RPS) mandate. NRECA opposes such a mandate and urges Congress to continue its successful policy of incentives. Renewable energy faces challenges that an RPS can not overcome, including transmission constraints, integration of intermittent resources with the grid, siting and permitting issues and manufacturing and supply constraints. Because an RPS can not address these problems, a one-size-fits-all Federal RPS will likely increase costs to consumers, underperform and discriminate based upon the inequitable availability of renewable resources.

It is helpful to refer to state experiences when evaluating the potential for a Federal RPS. While the RPS tailored to local resource availability can be workable on the state level, according to a Berkeley National Laboratory report compiling studies of state RPS programs¹ ("Berkeley analysis"), retail rate increases have resulted from RPS mandates in 23 of 30 states. Five states – New Jersey, Indiana, Rhode Island, Arizona and New York – have experienced retail rate increases of more than 3%, with highs of nearly 9% increases in Arizona. Such increases would be even higher were it not for the existence of the PTC and CREB programs.

Proponents of the RPS claim costs savings by assuming that new renewable energy will displace expensive natural gas generation. An RPS will, in fact, *raise* rates when the mandated commodity substitutes for lower cost products such as coal or hydropower. In Washington State, a new RPS mandate is estimated by the Washington Research Council to increase utility power expenses by 4-8%, as it forces utilities to replace low-cost renewable hydropower with more expensive forms of renewable energy. And according to the Berkeley analysis, the increasing likelihood that renewable energy will displace lower priced coal must be factored into claims that RPS mandates will result in cost savings.

In addition, while some states are meeting their RPS mandates, several – notably, Arizona, Nevada and Massachusetts – have set standards that utilities have not been able to meet due to manufacturing, resource and transmission constraints. In addition, according to the 2005 California Integrated Energy Policy Report set forth by the California Energy Commission, California's renewable energy procurement "is not occurring at a pace that will reach RPS goals by 2010." Shortcomings that the report identified were "lack of transparency, overly complex rules and inconsistent application among retail sellers."

With respect to a uniform Federal standard, an additional complication is that renewable resources are spread unevenly across the country. Proponents claim that a major goal of a Federal RPS is to encourage markets for new renewables. In reality, markets cannot be created in areas where there are little or no eligible fuel sources, such as wind. For example, the West has significant wind and geothermal potential while the Southeast has virtually none. Co-ops in the Southeast would especially be disadvantaged. In Georgia, for instance, due to the lack of existing renewable resources, a federal RPS would result in a 2 cents per kwh increase, roughly tantamount to a 25 percent increase in the cost of electricity.

According to the Berkeley analysis, "as the number of states that have adopted RPS policies grow, the available supply in regions with limited renewable potential may become more costly due to increased demand." NRECA does not support policies that discriminate against particular regions of the country.

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¹ Ernest Orlando Lawrence Berkeley National Laboratory, "Weighing the Costs and Benefits of Renewable Portfolio Standards: A Comparative Analysis of State-Level Policy Impact Projections," (January 2007).

- b. Is it appropriate for Government to impose generation-source conditions or energy savings requirements on load-serving utilities in order to serve public-policy purposes such as promotion of renewable energy production, energy efficiency, and reduction of carbon emissions? Why or why not?
- c. If you favor such a policy, how would you define its specific purpose?
- d. If Congress were to adopt an economy-wide policy mandating reductions in emissions of greenhouse gases, including the electricity industry, would such a portfolio standard policy remain necessary or advisable?

Given the risks of increased costs, resource shortages and discrimination against certain regions of the country, a Federal RPS would not be the most effective means to develop new renewable resources, either with or without a mandated greenhouse program. With respect to greenhouse gas reduction mandates, we believe any policy must meet the following principles before being considered by the Congress:

- ♦ <u>Economy-Wide</u>. Any plan should cover emissions from all sectors of the economy, not simply electricity generation, and should include provisions to ensure that other nations, including both developed and developing countries, are enacting policies to address this issue within their own borders.
- ♦ <u>Fuel-Diverse</u>. Any climate change proposal should maintain fuel diversity, allowing a variety of fuel sources to meet the energy and economic needs of the country. Provisions to encourage new nuclear generation should eliminate any barriers to cooperatives participating in new projects with non-cooperative partners.
- ♦ Minimize Negative Economic Consequences. Any proposal should include provisions, such as an economic safety-valve, to protect the US economy from significant negative impacts. Additionally, Congress should work to protect both urban and rural consumers from any significant negative economic impacts from climate change legislation.
- ♦ Terrestrial Sequestration-Focused (short-term). Any plan should recognize that in the short-term, terrestrial sequestration, conservation, and energy efficiency appear to be among the most cost-effective methods of mitigating greenhouse gas emissions at this time. Additionally, it should be recognized that sequestration can provide benefits to rural areas and agricultural-and forestry-based economies.
- ◆ <u>Technology-Focused (long-term)</u>. Any plan should recognize that in the long term, new technologies including the capture and sequestration of carbon dioxide from power plants will be critical to addressing this issue, but costeffective, commercially available technologies are still in development and are years or decades away from large-scale commercial applications. Every effort must be made, and appropriate funding provided, to accelerate the research, development, demonstration, and commercialization of these technologies.

- Additionally, potential liability issues associated with the injection and geologic storage of carbon dioxide should be addressed.
- Provide Equitable Incentives. Any plan should encourage cost-effective reductions and make incentives available to all segments of the utility industry to develop and deploy advanced electric generation, transmission, and distribution technologies.
- Protect Economic and Energy Security. Any plan should recognize that climate change policy and energy policy are inextricably linked, and that climate change policies can have a significant impact on our nation's economic and energy security.
- ♦ Remove Existing Regulatory Barriers. Any plan should remove regulatory and other impediments to increasing the efficiency of existing generating units.
- e. What analysis has been done of any portfolio standards requirements you endorse to demonstrate:

Its economic costs to consumers, nationally, and in various regions, in electricity rates?

A study should be initiated to determine at what price does an increase in the electricity price due to a federal RPS result in business displacement and economic hardship to low-income residents. At what level is such a ceiling?

Its benefits in greenhouse gas emission reductions?

- i. Its implications for electricity reliability, security, and grid management?
- ii. Its implications for jobs and economic development?
- iii. Its implications for utility capital investment?
- iv. Other relevant factors?

2. Portfolio Inclusions and Exclusions

- a. What is the principle that should determine inclusion or exclusion of any energy source from an adopted portfolio standard? (i.e. excludes all fossil-fired generation, includes all generation that emits no GHG, excludes all generation below given energy-conversion efficiency, etc.)
- b. What generation sources for retail electricity supplies (including efficiency offsets) should be included and should be excluded from any mandatory portfolio requirement that is adopted? Please provide your reasons for excluding any sources.

- c. To the extent that multiple renewable energy sources and efficiency or other sources are eligible for inclusion, should any tiers among them or separate subrequirements be adopted?
- d. Should there be any distinction between existing and new sources of generation eligible for inclusion in the portfolio? If so, what would be the threshold date for eligibility?
- e. Would the electricity equivalent of useful thermal energy from eligible sources be credited against the requirement? Why or why not?
- f. To the extent energy efficiency is included:
 - i. How would the required savings be measured and verified?
 - ii. Against what base consumption period (historic or projected)?

3. Percentage Requirement and Timing

- a. What target percentage of total retail power deliveries should be achieved by the required portfolio?
- b. What is the target year for reaching the ultimate mandated portfolio percentage?
- c. Should there be a straight-line, accelerating, or other form of "ramp-up" to the ultimate target percentage?
- d. Should there be any "off-ramps" or other built-in automatic changes in requirements as a function of contingencies? If so, what should they be? (e.g., price or cost thresholds, contingencies for natural climate conditions, lack of adequate transmission, etc.)

4. Relationship to State Portfolio Standards and Utility Regulation

- a. Should an adopted Federal portfolio standard set:
 - i. A minimum standard, allowing States to set or maintain higher targets?
 - ii. A preemptive standard, prohibiting States to set higher or different targets?
 - iii. Merely a mandate for a standard, allowing States to set their own targets at any level?

- iv. Merely a given percentage target, allowing States to elect generation or efficiency sources eligible to meet it?
- v. A standard applying only to States without prior portfolio requirements, grandfathering all prior standard programs?
- b. Can and should State regulatory agencies be required to pass through the costs of complying with Federal portfolio standards requirements in retail rates?

5. Utility Coverage

a. Should any retail sellers of electricity be exempt from the portfolio requirement? (e.g., municipal utilities, rural cooperatives, utilities selling less that a minimum volume of power, unregulated marketers in States with competitive retail markets, etc.)

A number of proposals being considered by Congress exempt public power systems and electric cooperatives, or all utilities that fall under a certain size threshold based upon sales, from the RPS. These exclusions recognize the fact that electric cooperative systems, which collectively own only 5% of the nation's generation capacity, are smaller in size and serve far fewer customers per mile than investor-owned utilities. Specifically, electric cooperatives serve an average of only seven consumers per mile compared with the 35 customers per mile served by IOUs. To put this in greater perspective, electric cooperatives serve only 12% of the population -- but maintain 42% of the nation's electricity distribution lines covering three-quarters of the land mass. Cooperative revenue per mile averages only \$10,565, while IOU average revenue is more than six times higher, at \$62,665. In addition, electric cooperative households generally have less income than the rest of the nation, with nearly half of the cooperative service territories suffering poverty rates that are higher than the national average. Potentially disproportionate economic consequences of mandating higher cost technologies where it is already expensive to serve should be considered by the committee.

- b. Should any standard apply to wholesale power markets or sales?
- c. Should there be any basis for discretionary exemptions of certain States or utilities?

6. Administration and Enforcement

a. Should a Federal Government entity enforce the requirement and decide on any exemptions?

- i. If so, which one? (e.g., the Environmental Protection Agency? The
 Department of Energy? The Federal Energy Regulatory
 Commission? A newly created office or entity?)
- ii. If not, should enforcement be delegated to the Stated or to regional transmission or electric-system-operation entities?
- b. How should Federal and State enforcement be coordinated in States with their own portfolio requirements?
- c. What penalties should apply for failure of utilities to meet the percentage mandate?

7. Credits and Trading

a. Should tradable credits for qualifying generation be utilized as the mechanism for establishing compliance?

Trading in renewable energy credits, (RECs), also called green tags, should be considered as an <u>alternative</u> to a federal RPS. RECs represent the non-energy or environmental attributes of renewable resources. Power suppliers can use RECs to provide renewable energy products to end-use consumers. Utilities can also purchase RECs to meet renewable energy standards in their states. And, RECs are providing critical income for renewable generation projects.

Some states allow REC trading intra-state and some also allow interstate trading. Informal regional REC markets are emerging and organizations which market and aggregate RECs are springing up around the country. Diverse businesses are beginning to tout their purchase of renewable energy via the credits. The National Renewable Energy Laboratory (NREL) estimates that the REC market could grow to nearly \$1 billion by 2010 ("Emerging Markets for Renewable energy Certificates: Opportunities and Challenges," NREL, January, 2005). However, there is no national clearing house for trading this new commodity. Without a national clearing house, renewable energy development could be stifled.

A national clearing house that includes an information-based trading and record-keeping platform, a certification program and model contracts will produce many benefits. Under a national program, a generator or owner of a green tag could register the tag with the platform and with the accompanying data. Such data would include the type of resource from which it is derived, including generator type, ownership, vintage, location, etc. Any customer could then come in and purchase the tag from the platform based on its individual preferences or needs. The platform would then record the disposition of the tag by the wholesale purchaser (resale at retail, use for an RPS, etc), thereby taking the tag out of circulation and ensuring that it cannot be sold twice.

A clearing house of this type would not override any individual state's regulatory preference for specific resources. Nor would it narrow consumer-choices based on a particular definition of "green". Having a national "one stop shop" should increase market liquidity and transparency, expand consumer options, reduce the cost of tags, and reduce the regional price differential between tags.

- b. Should credit trading be permitted or required on a national basis in order to achieve last-cost compliance with the portfolio standards?
- c. Should there be a cap on credit values to limit costs?
- d. As between a utility purchaser and a qualifying power generator, to whom should the portfolio standard credits be initially allocated?

Regardless of the trading mechanism, RECs should be allocated to the purchasing utility. Utilities carry the responsibility of meeting mandates and goals, and therefore the benefits of ownership should accrue at the utility level.

- e. What relationship, if any, should portfolio standard credits have to other State and Federal credit trading programs for SO2, greenhouse gases, or biofuels?
- f. What requirements, if any, would there be concerning the length of contracts for qualifying generation and ownership of credit rights?